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## ABSTRACT

Presented is a compilation of data, developed by the New York State Department of Education from table summaries of school forms, of science programs in New York State in 1973-74. A list of tables is included. Among these tables are: (1) the number of school districts indicating their plans for revision of local science courses (K-12); (2) the number of school districts indicating the science discipline emphasized for the majority of students at grades seven through nine; and (3) the number of school districts indicating the type of facilities used for teaching science to the majority of students in elementary grades. (RM)

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IN - DEPTH SURVEY OF  
SCIENCE PROGRAMS  
IN NEW YORK STATE  
1973 - 74

Compilation of Data  
by the  
Bureau of Science Education  
from  
Table Summaries of School Forms  
Prepared by the  
Bureau of Statistical Services

The University of the State of New York  
THE STATE EDUCATION DEPARTMENT  
Albany, New York 12234

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\*Tables I-IV from Basic Educational Data System (BEDS) 1973-74.

TABLE A

Enrollment Size of School Districts With Number of Questionnaires Received and the Percent of Total Responses.

| Enrollment Size | Number of Questionnaires Received | Percent of Total Responses |
|-----------------|-----------------------------------|----------------------------|
| 1 - 749         | 92                                | 13.2                       |
| 750 - 1,499     | 169                               | 24.2                       |
| 1,500 - 3,499   | 236                               | 33.9                       |
| 3,500 - 5,999   | 79                                | 11.3                       |
| 6,000 - 9,999   | 50                                | 7.2                        |
| 10,000 - 25,000 | 35                                | 5.0                        |
| Over 25,000     | 36                                | 5.2                        |
| Total State     | 697                               | 100.0                      |

TABLE B

Regions of the State With Number of Questionnaires Received and the Percent of Total Responses.

| Regions of State           | Number of Questionnaires Received | Percent of Total Responses |
|----------------------------|-----------------------------------|----------------------------|
| New York City              | 24                                | 3.4                        |
| Nassau-Suffolk             | 119                               | 17.1                       |
| Mid-Hudson                 | 98                                | 14.1                       |
| Upper Hudson               | 74                                | 10.6                       |
| Lake Champlain-Lake George | 43                                | 6.2                        |
| Black River-St. Lawrence   | 41                                | 5.9                        |
| Upper Mohawk Valley        | 28                                | 4.0                        |
| Central                    | 44                                | 6.3                        |
| Southern Tier-East         | 57                                | 8.2                        |
| Southern Tier-Central      | 18                                | 2.6                        |
| Southern Tier-West         | 43                                | 6.2                        |
| Genesee-Finger Lakes       | 64                                | 9.2                        |
| Western                    | 44                                | 6.3                        |
| Total State                | 697                               | 100.0                      |

TABLE 1

For Specific Science Courses (K-12) the number of School Districts Responding (Percent of Statewide Responding Total) and Indicating if (1) Printed Course of Study is Available and Being Used and (2) Behavioral Objectives Exist In Written Form (Percent of Those Responding in (1) and Percent of Statewide Responding Total)

| Science Program                     | Printed Course Available<br>and Being Used | Behavioral Objectives<br>Exist In Written Form |
|-------------------------------------|--------------------------------------------|------------------------------------------------|
| 1. Locally Designed Curriculum      | 357 (51.2)                                 | 141 (39.5) (20.2)                              |
| 2. Text Series                      | 361 (51.8)                                 | 85 (23.5) (12.2)                               |
| 3. State Elementary Science Program | 246 (35.3)                                 | 30 (12.2) (4.3)                                |
| 4. SAPA Program                     | 90 (12.9)                                  | 53 (58.9) (7.6)                                |
| 5. SCIS Program                     | 75 (10.8)                                  | 32 (42.6) (4.6)                                |
| 6. ESS Program                      | 120 (17.2)                                 | 27 (22.5) (3.9)                                |
| 7. COPES Program                    | 10 (1.4)                                   | 4 (40.0) (0.6)                                 |
| 8. Minnimast                        | 1 (0.1)                                    | 0 (0.0) (0.0)                                  |
| 9. Interaction Series               | 36 (5.2)                                   | 18 (50.0) (2.6)                                |
| 10. ISCS Program                    | 133 (19.1)                                 | 88 (66.2) (12.6)                               |
| 11. IPS Program                     | 131 (18.8)                                 | 53 (40.5) (7.6)                                |
| 12. TSM Program                     | 17 (2.4)                                   | 9 (52.9) (1.3)                                 |
| 13. Minicourses in Science          | 111 (15.9)                                 | 43 (38.7) (6.2)                                |
| 14. Unified Science                 | 12 (1.7)                                   | 6 (50.0) (0.9)                                 |
| 15. Ecology                         | 179 (25.7)                                 | 59 (33.0) (8.5)                                |
| 16. Environmental Science           | 152 (21.8)                                 | 52 (34.2) (7.5)                                |
| 17. State Junior High Blocks        | 305 (43.8)                                 | 76 (24.9) (10.9)                               |
| 18. Regents Earth Science           | 445 (63.8)                                 | 206 (46.3) (29.6)                              |
| 19. Regents Biology                 | 602 (86.4)                                 | 162 (26.9) (23.2)                              |
| 20. Regents Chemistry               | 604 (86.7)                                 | 147 (24.3) (21.1)                              |
| 21. Regents Physics                 | 582 (83.5)                                 | 141 (24.2) (20.2)                              |
| 22. General Biology (State)         | 221 (31.7)                                 | 52 (23.5) (7.5)                                |
| 23. General Chemistry (State)       | 270 (38.7)                                 | 64 (23.7) (9.2)                                |
| 24. General Physics (State)         | 136 (19.5)                                 | 25 (18.4) (3.6)                                |
| 25. Local Earth Science             | 191 (27.4)                                 | 61 (31.9) (8.8)                                |
| 26. Local Biology                   | 267 (38.3)                                 | 64 (24.0) (9.2)                                |
| 27. Local Chemistry                 | 154 (22.1)                                 | 45 (29.2) (6.5)                                |
| 28. Local Physics                   | 99 (14.2)                                  | 25 (25.6) (3.6)                                |
| 29. Advanced Placement Biology      | 132 (18.9)                                 | 28 (13.8) (4.0)                                |
| 30. Advanced Placement Chemistry    | 81 (11.6)                                  | 18 (22.2) (2.6)                                |
| 31. Advanced Placement Physics      | 41 (5.9)                                   | 10 (24.4) (1.4)                                |
| 32. Other                           | 192 (27.5)                                 | 74 (38.5) (10.6)                               |

TABLE 2A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding in that Size) that a Standing Science Curriculum Committee Does Exist at Various Levels (Districtwide, Elementary, Junior High-Middle School, Senior High)

| Enrollment Size | Number (Percent) of School Districts Indicating That<br>A Standing Science Curriculum Committee Does Exist At |                     |                                       |                      |
|-----------------|---------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------|----------------------|
|                 | Districtwide<br>Level                                                                                         | Elementary<br>Level | Junior High<br>Middle School<br>Level | Senior High<br>Level |
| 1 - 749         | 12 (13.0)                                                                                                     | 22 (23.9)           | 24 (26.1)                             | 25 (27.2)            |
| 750 - 1,499     | 16 (9.5)                                                                                                      | 32 (18.9)           | 56 (33.1)                             | 51 (30.2)            |
| 1,500 - 3,499   | 38 (16.1)                                                                                                     | 63 (26.7)           | 83 (35.2)                             | 81 (34.3)            |
| 3,500 - 5,999   | 9 (11.4)                                                                                                      | 25 (31.6)           | 30 (38.0)                             | 31 (39.2)            |
| 6,000 - 9,999   | 10 (20.0)                                                                                                     | 12 (24.0)           | 12 (24.0)                             | 12 (24.0)            |
| 10,000 - 25,000 | 9 (25.7)                                                                                                      | 10 (28.6)           | 12 (34.3)                             | 15 (42.9)            |
| Over 25,000     | 15 (41.7)                                                                                                     | 13 (36.1)           | 15 (41.7)                             | 6 (16.7)             |
| Total State     | 109 (15.6)                                                                                                    | 177 (25.4)          | 232 (33.3)                            | 221 (32.8)           |

TABLE 2B

By Region the Number of School Districts Responding (Percent of Total Responding in that Region) that a Standing Science Curriculum Committee Does Exist at Various Levels (Districtwide, Elementary, Junior High-Middle School, Senior High)

| New York State Region      | Number (Percent) of School Districts Indicating That A Standing Science Curriculum Committee Does Exist At |                  |                                 |                   |
|----------------------------|------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|-------------------|
|                            | Districtwide Level                                                                                         | Elementary Level | Junior High Middle School Level | Senior High Level |
| New York City              | 11 (45.8)                                                                                                  | 9 (39.1)         | 10 (43.5)                       | 1 (100.)          |
| Nassau-Suffolk             | 22 (18.5)                                                                                                  | 37 (31.1)        | 37 (31.1)                       | 33 (27.7)         |
| Mid-Hudson                 | 15 (15.3)                                                                                                  | 23 (23.5)        | 29 (29.6)                       | 32 (32.7)         |
| Upper Hudson               | 16 (21.6)                                                                                                  | 20 (27.0)        | 17 (23.0)                       | 16 (21.6)         |
| Lake Champlain-Lake George | 4 (9.3)                                                                                                    | 9 (20.9)         | 11 (25.6)                       | 9 (20.9)          |
| Black River-St. Lawrence   | 7 (17.1)                                                                                                   | 11 (26.8)        | 15 (36.6)                       | 14 (34.1)         |
| Upper Mohawk Valley        | 3 (10.7)                                                                                                   | 1 (3.6)          | 8 (28.6)                        | 9 (32.1)          |
| Central                    | 7 (15.9)                                                                                                   | 14 (31.8)        | 19 (43.2)                       | 19 (43.2)         |
| Southern Tier East         | 4 (7.0)                                                                                                    | 11 (19.3)        | 17 (29.8)                       | 18 (31.6)         |
| Southern Tier Central      | 0 (0.0)                                                                                                    | 2 (11.1)         | 6 (33.3)                        | 7 (38.9)          |
| Southern Tier West         | 2 (4.7)                                                                                                    | 8 (18.6)         | 13 (30.2)                       | 14 (32.6)         |
| Genesee-Finger Lakes       | 10 (15.6)                                                                                                  | 22 (34.4)        | 31 (48.4)                       | 30 (46.9)         |
| Western                    | 8 (18.2)                                                                                                   | 10 (22.7)        | 19 (43.2)                       | 19 (43.2)         |
| Total State                | 109 (15.6)                                                                                                 | 177 (25.4)       | 232 (33.3)                      | 221 (32.8)        |

TABLE 3

For Specific Science Courses (7-12) the Number of School Districts Responding (Percent of Responding Total) Indicating the Average Number of Minutes per Week Students are Engaged in Laboratory Investigations.

| Course                    | Course Not Offered or No Response | Average Number of Minutes per Week Students Are Engaged in Lab Investigations (Percent of Those That Offer Course) |             |              |              |              |              |
|---------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------|--------------|--------------|--------------|--------------|
|                           |                                   | 0 Min.                                                                                                             | 1 - 15 Min. | 16 - 33 Min. | 34 - 45 Min. | 46 - 80 Min. | Over 80 Min. |
| Science 7                 | 43 (6.0)                          | 49 (7.5)                                                                                                           | 69 (10.6)   | 68 (10.4)    | 167 (25.5)   | 110 (16.3)   | 191 (29.2)   |
| Science 8                 | 40 (5.7)                          | 45 (6.8)                                                                                                           | 57 (8.7)    | 59 (9.0)     | 179 (27.2)   | 100 (15.2)   | 217 (33.0)   |
| Science 9                 | 80 (11.5)                         | 46 (7.4)                                                                                                           | 33 (5.3)    | 67 (10.8)    | 169 (27.4)   | 99 (16.0)    | 203 (32.9)   |
| Regents Earth Science     | 240 (34.4)                        | 2 (0.4)                                                                                                            | 3 (0.7)     | 7 (1.5)      | 92 (20.1)    | 114 (24.9)   | 239 (52.3)   |
| Regents Biology           | 83 (11.9)                         | 0 (0.0)                                                                                                            | 1 (0.2)     | 7 (1.1)      | 151 (24.6)   | 175 (28.5)   | 280 (45.6)   |
| Regents Chemistry         | 80 (7.8)                          | 0 (0.0)                                                                                                            | 2 (0.3)     | 1 (0.2)      | 115 (18.6)   | 189 (30.6)   | 310 (50.2)   |
| Regents Physics           | 95 (13.6)                         | 2 (0.3)                                                                                                            | 0 (0.0)     | 6 (0.9)      | 122 (20.3)   | 177 (29.4)   | 295 (49.0)   |
| Non-Regents Earth Science | 195 (71.0)                        | 12 (5.9)                                                                                                           | 6 (3.0)     | 11 (5.4)     | 67 (33.1)    | 45 (22.3)    | 61 (30.2)    |
| Non-Regents Biology       | 252 (36.2)                        | 19 (4.3)                                                                                                           | 7 (1.6)     | 23 (5.2)     | 160 (36.0)   | 121 (27.2)   | 115 (25.8)   |
| Non-Regents Chemistry     | 316 (45.3)                        | 11 (2.8)                                                                                                           | 3 (0.8)     | 16 (4.2)     | 113 (29.7)   | 108 (28.3)   | 130 (34.1)   |
| Non-Regents Physics       | 483 (69.3)                        | 5 (2.3)                                                                                                            | 1 (0.5)     | 4 (1.9)      | 72 (33.6)    | 57 (26.6)    | 75 (35.0)    |

TABLE 4

For Specific Science Courses (7-12) the Number of School Districts Responding (Percent of Responding Total) Indicating How the Laboratory Program is Scheduled Each Week.

| Course                    | Course Not Offered or No Response | Scheduling of Laboratory Program<br>(Percent of Those That Offer Course) |                   |                   |                           |                       |
|---------------------------|-----------------------------------|--------------------------------------------------------------------------|-------------------|-------------------|---------------------------|-----------------------|
|                           |                                   | No Scheduled Lab Period                                                  | One Single Period | One Double Period | At Least 2 Double Periods | Other Type Scheduling |
| Science 7                 | 40 (5.7)                          | 411 (62.6)                                                               | 86 (13.1)         | 18 (2.7)          | 10 (1.5)                  | 132 (20.1)            |
| Science 8                 | 37 (5.3)                          | 391 (59.2)                                                               | 89 (13.5)         | 22 (3.3)          | 12 (1.8)                  | 146 (22.1)            |
| Science 9                 | 85 (12.2)                         | 346 (56.5)                                                               | 95 (15.5)         | 27 (4.4)          | 21 (3.4)                  | 123 (20.1)            |
| Regents Earth Science     | 240 (34.4)                        | 50 (10.9)                                                                | 131 (28.7)        | 106 (23.2)        | 104 (22.8)                | 66 (14.4)             |
| Regents Biology           | 84 (12.0)                         | 20 (3.3)                                                                 | 208 (33.9)        | 157 (25.6)        | 134 (21.8)                | 94 (15.3)             |
| Regents Chemistry         | 81 (11.6)                         | 13 (2.1)                                                                 | 154 (25.0)        | 177 (28.7)        | 161 (26.1)                | 111 (18.0)            |
| Regents Physics           | 98 (14.1)                         | 20 (3.3)                                                                 | 159 (26.5)        | 169 (28.2)        | 150 (25.0)                | 101 (16.9)            |
| Non-Regents Earth Science | 494 (70.8)                        | 100 (49.3)                                                               | 52 (25.6)         | 19 (9.4)          | 7 (3.4)                   | 25 (12.3)             |
| Non-Regents Biology       | 256 (36.7)                        | 181 (41.0)                                                               | 116 (26.3)        | 46 (10.4)         | 36 (8.2)                  | 62 (14.1)             |
| Non-Regents Chemistry     | 317 (45.5)                        | 115 (30.3)                                                               | 93 (24.5)         | 70 (18.4)         | 40 (10.5)                 | 62 (16.3)             |
| Non-Regents Physics       | 485 (69.6)                        | 64 (30.2)                                                                | 57 (26.9)         | 33 (15.6)         | 25 (11.8)                 | 33 (15.6)             |

TABLE 5

For Specific Science Courses and Levels (K-12) the Number of School Districts Responding (Percent of Responding Total) Indicating the Adequacy of Equipment and Materials for Hands On Activities by Students.

| Grade Level<br>and Courses   | Course<br>Not Offered<br>or<br>No Response | Adequacy of Student Equipment<br>and Materials<br>(Percent of Those That Offer Course) |                                                       |
|------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------|
|                              |                                            | Materials and<br>Equipment<br>Are Adequate                                             | Materials and<br>Equipment<br>Are <u>Not</u> Adequate |
| Science K-3                  | 50 (7.2)                                   | 419 (64.8)                                                                             | 228 (35.2)                                            |
| Science 4-6                  | 30 (4.3)                                   | 434 (65.1)                                                                             | 233 (34.9)                                            |
| Science 7-9                  | 40 (5.7)                                   | 516 (78.5)                                                                             | 141 (21.5)                                            |
| Regents Earth Science        | 240 (34.4)                                 | 415 (90.8)                                                                             | 42 (9.2)                                              |
| Regents Biology              | 82 (11.8)                                  | 577 (93.8)                                                                             | 38 (6.2)                                              |
| Regents Chemistry            | 79 (11.3)                                  | 586 (94.8)                                                                             | 32 (5.2)                                              |
| Regents Physics              | 96 (13.8)                                  | 542 (90.2)                                                                             | 59 (9.8)                                              |
| Non-Regents<br>Earth Science | 494 (70.9)                                 | 181 (89.2)                                                                             | 22 (10.8)                                             |
| Non-Regents Biology          | 253 (36.3)                                 | 412 (92.8)                                                                             | 32 (7.2)                                              |
| Non-Regents Chemistry        | 316 (45.3)                                 | 360 (94.5)                                                                             | 21 (5.5)                                              |
| Non-Regents Physics          | 482 (69.2)                                 | 196 (91.2)                                                                             | 19 (8.8)                                              |
| Interdisciplinary Science    | 654 (93.8)                                 | 32 (74.4)                                                                              | 11 (25.6)                                             |
| Environmental Science        | 520 (74.6)                                 | 139 (78.5)                                                                             | 38 (21.5)                                             |

TABLE 6

For Specific Science Courses and Levels (K-12) the Number of School Districts Responding (Percent of Responding Total) Indicating Their Plans for Revision of Local Science Courses (K-12).

| Grade Level<br>and Courses   | Course<br>Not Offered<br>or<br>No Response | Plans for Revision of Local Science Courses<br>(Percent of Those That Offer Course) |                                |                                      |                             |
|------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|-----------------------------|
|                              |                                            | Revision<br>Has Been<br>Completed                                                   | Revision<br>Planned<br>1974-75 | Revision<br>Planned<br>In the Future | No Plans<br>for<br>Revision |
| Science K-3                  | 41 (5.9)                                   | 123 (18.8)                                                                          | 111 (16.9)                     | 235 (35.8)                           | 187 (28.5)                  |
| Science 4-6                  | 28 (4.0)                                   | 125 (18.7)                                                                          | 138 (20.6)                     | 229 (34.2)                           | 177 (26.5)                  |
| Science 7-9                  | 38 (5.5)                                   | 158 (24.0)                                                                          | 166 (25.2)                     | 203 (30.8)                           | 132 (20.0)                  |
| Earth Science                | 478 (68.6)                                 | 68 (31.0)                                                                           | 33 (15.1)                      | 38 (17.4)                            | 80 (36.5)                   |
| Biology                      | 251 (36.0)                                 | 105 (23.5)                                                                          | 48 (10.8)                      | 88 (19.7)                            | 205 (46.0)                  |
| Chemistry                    | 311 (44.6)                                 | 101 (26.1)                                                                          | 43 (11.1)                      | 62 (16.0)                            | 180 (46.6)                  |
| Physics                      | 458 (65.7)                                 | 53 (22.2)                                                                           | 23 (9.6)                       | 49 (20.5)                            | 114 (47.7)                  |
| Interdisciplinary<br>Science | 654 (93.8)                                 | 5 (11.6)                                                                            | 13 (30.2)                      | 12 (27.9)                            | 13 (30.2)                   |
| Environmental<br>Science     | 518 (74.3)                                 | 33 (18.4)                                                                           | 53 (29.6)                      | 48 (26.8)                            | 45 (25.1)                   |
| Other Science                | 551 (79.1)                                 | 39 (26.7)                                                                           | 50 (34.2)                      | 35 (24.0)                            | 22 (15.1)                   |

TABLE 7

For Specific Levels, Primary, Intermediate, Junior High-Middle School, the Number of School Districts Responding (Percent of Responding Total) Indicating the Degree of Emphasis of the Teaching of Reading in the Science Curriculum.

| Grade Level               | Degree of Emphasis of the Teaching of Reading in the Science Curriculum (Percent of Those That Responded) |            |            |               |
|---------------------------|-----------------------------------------------------------------------------------------------------------|------------|------------|---------------|
|                           | Low Emphasis                                                                                              |            |            | High Emphasis |
|                           | (1)                                                                                                       | (2)        | (3)        | (4)           |
| Primary                   | 126 (18.7)                                                                                                | 172 (25.6) | 218 (32.4) | 157 (23.3)    |
| Intermediate              | 73 (10.9)                                                                                                 | 202 (30.1) | 283 (42.2) | 112 (16.7)    |
| Junior High-Middle School | 118 (17.8)                                                                                                | 264 (39.8) | 199 (30.0) | 82 (12.4)     |

TABLE 8

For Specific Levels, Primary, Intermediate, Junior High-Middle School, the Number of School Districts Responding (Percent of Responding Total) Indicating the Degree of Emphasis of the Teaching of Mathematics in the Science Curriculum.

| Grade Level               | Degree of Emphasis of the Teaching of Mathematics in the Science Curriculum (Percent of Those That Responded) |            |            |               |
|---------------------------|---------------------------------------------------------------------------------------------------------------|------------|------------|---------------|
|                           | Low Emphasis                                                                                                  |            |            | High Emphasis |
|                           | (1)                                                                                                           | (2)        | (3)        | (4)           |
| Primary                   | 178 (26.4)                                                                                                    | 239 (35.5) | 179 (26.6) | 77 (11.4)     |
| Intermediate              | 99 (14.8)                                                                                                     | 258 (38.5) | 239 (35.7) | 74 (11.0)     |
| Junior High-Middle School | 34 (5.1)                                                                                                      | 195 (29.4) | 311 (46.8) | 124 (18.7)    |

TABLE 9A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding in that Size) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 7 and Statewide.

| Enrollment Size | Course Not Offered or No Response | Science Discipline Emphasized in Grade 7<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-----------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                 |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| 1-749           | 5 (5.4)                           | 62 (71.3)                                                                        | 5 (5.7)                   | 3 (3.4)                | 16 (18.4)                          | 1 (1.1)         | 0 (0.0)  |
| 750-1,499       | 9 (5.3)                           | 114 (69.6)                                                                       | 13 (8.1)                  | 3 (1.9)                | 28 (17.5)                          | 1 (0.6)         | 1 (0.6)  |
| 1,500-3,499     | 14 (5.9)                          | 136 (61.3)                                                                       | 32 (14.4)                 | 5 (2.3)                | 44 (19.8)                          | 0 (0.0)         | 5 (2.3)  |
| 3,500-5,999     | 2 (2.5)                           | 55 (71.4)                                                                        | 6 (7.8)                   | 1 (1.3)                | 14 (18.2)                          | 0 (0.0)         | 1 (1.3)  |
| 6,000-9,999     | 5 (10.0)                          | 26 (57.8)                                                                        | 6 (13.3)                  | 4 (8.9)                | 6 (13.3)                           | 2 (4.4)         | 1 (2.2)  |
| 10,000-25,000   | 3 (8.6)                           | 19 (59.3)                                                                        | 4 (12.5)                  | 2 (6.3)                | 5 (15.6)                           | 0 (0.0)         | 2 (6.3)  |
| Over 25,000     | 2 (5.5)                           | 5 (14.7)                                                                         | 1 (2.9)                   | 2 (5.9)                | 26 (76.5)                          | 0 (0.0)         | 0 (0.0)  |
| Total State     | 40 (5.7)                          | 417 (63.5)                                                                       | 67 (10.2)                 | 20 (3.0)               | 139 (21.2)                         | 4 (0.6)         | 10 (1.5) |

TABLE 9B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 7 and Statewide.

| New York State Region         | Course Not Offered or No Response | Science Discipline Emphasized in Grade 7<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-------------------------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                               |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| New York City                 | 0 (0.0)                           | 0 (0.0)                                                                          | 1 (4.3)                   | 0 (0.0)                | 22 (95.6)                          | 0 (0.0)         | 0 (0.0)  |
| Nassau-Suffolk                | 19 (16.0)                         | 65 (65.0)                                                                        | 10 (10.0)                 | 3 (3.0)                | 18 (18.0)                          | 1 (1.0)         | 3 (3.0)  |
| Mid-Hudson                    | 2 (2.0)                           | 61 (63.5)                                                                        | 8 (8.3)                   | 1 (1.0)                | 25 (26.0)                          | 1 (1.0)         | 0 (0.0)  |
| Upper Hudson                  | 3 (4.1)                           | 49 (69.0)                                                                        | 4 (5.6)                   | 3 (4.2)                | 14 (19.7)                          | 1 (1.4)         | 0 (0.0)  |
| Lake Champlain<br>Lake George | 5 (5.8)                           | 20 (52.6)                                                                        | 5 (13.1)                  | 0 (0.0)                | 12 (31.6)                          | 0 (0.0)         | 1 (2.6)  |
| Black River<br>St. Lawrence   | 1 (2.4)                           | 23 (57.5)                                                                        | 3 (7.5)                   | 1 (2.5)                | 12 (30.0)                          | 1 (2.5)         | 0 (0.0)  |
| Upper<br>Mohawk Valley        | 1 (3.6)                           | 24 (88.9)                                                                        | 1 (3.7)                   | 0 (0.0)                | 2 (7.4)                            | 0 (0.0)         | 0 (0.0)  |
| Central                       | 2 (4.5)                           | 27 (64.3)                                                                        | 8 (19.0)                  | 1 (2.4)                | 4 (9.5)                            | 0 (0.0)         | 2 (4.8)  |
| Southern<br>Tier East         | 3 (5.3)                           | 40 (74.0)                                                                        | 6 (11.1)                  | 1 (1.9)                | 6 (11.1)                           | 0 (0.0)         | 1 (1.9)  |
| Southern<br>Tier Central      | 0 (0.0)                           | 13 (72.2)                                                                        | 3 (16.7)                  | 0 (0.0)                | 2 (11.1)                           | 0 (0.0)         | 0 (0.0)  |
| Southern<br>Tier West         | 1 (2.3)                           | 33 (78.6)                                                                        | 1 (2.4)                   | 3 (7.1)                | 5 (11.9)                           | 0 (0.0)         | 0 (0.0)  |
| Genesee<br>Finger Lakes       | 0 (0.0)                           | 41 (64.1)                                                                        | 9 (14.1)                  | 2 (3.1)                | 10 (15.6)                          | 0 (0.0)         | 2 (3.1)  |
| Western                       | 2 (4.5)                           | 21 (50.0)                                                                        | 8 (19.0)                  | 5 (11.9)               | 7 (16.7)                           | 0 (0.0)         | 1 (2.4)  |
| Total State                   | 39 (5.6)                          | 417 (63.5)                                                                       | 67 (10.2)                 | 20 (3.0)               | 139 (21.2)                         | 4 (0.6)         | 10 (1.5) |

TABLE 9C

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding in that Size) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 8 and Statewide.

| Enrollment Size | Course Not Offered or No Response | Science Discipline Emphasized in Grade 8<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-----------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                 |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| 1-749           | 5 (5.4)                           | 9 (10.3)                                                                         | 34 (39.1)                 | 29 (33.3)              | 14 (16.1)                          | 1 (1.1)         | 0 (0.0)  |
| 750-1,499       | 9 (5.3)                           | 6 (3.8)                                                                          | 70 (43.8)                 | 44 (27.5)              | 34 (21.3)                          | 1 (0.6)         | 5 (3.1)  |
| 1,500-3,499     | 11 (4.7)                          | 12 (5.3)                                                                         | 79 (35.1)                 | 69 (30.7)              | 55 (24.4)                          | 0 (0.0)         | 10 (4.4) |
| 3,500-5,999     | 3 (1.3)                           | 4 (5.3)                                                                          | 26 (34.2)                 | 27 (35.5)              | 16 (21.1)                          | 0 (0.0)         | 3 (3.9)  |
| 6,000-9,999     | 5 (1.0)                           | 4 (8.9)                                                                          | 17 (37.8)                 | 13 (28.9)              | 8 (17.8)                           | 1 (2.2)         | 2 (4.4)  |
| 10,000-25,000   | 3 (8.6)                           | 1 (3.1)                                                                          | 9 (27.3)                  | 15 (46.9)              | 5 (15.6)                           | 0 (0.0)         | 2 (6.2)  |
| Over 25,000     | 1 (2.8)                           | 2 (5.7)                                                                          | 3 (8.6)                   | 3 (8.6)                | 26 (74.3)                          | 0 (0.0)         | 1 (2.8)  |
| Total State     | 37 (5.3)                          | 38 (5.6)                                                                         | 238 (36.1)                | 200 (30.3)             | 158 (23.9)                         | 3 (0.5)         | 23 (3.5) |

TABLE 9D

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 8 and Statewide.

| New York State Region | Course Not Offered or No Response | Science Discipline Emphasized in Grade 8<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-----------------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                       |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| New York City         | 0 (0.0)                           | 0 (0.0)                                                                          | 0 (0.0)                   | 0 (0.0)                | 22 (95.7)                          | 0 (0.0)         | 1 (4.3)  |
| Nassau-Suffolk        | 19 (16.0)                         | 4 (4.0)                                                                          | 44 (44.0)                 | 27 (27.0)              | 18 (18.0)                          | 1 (1.0)         | 6 (6.0)  |
| Mid-Hudson            | 2 (2.0)                           | 3 (3.1)                                                                          | 28 (29.2)                 | 37 (38.5)              | 24 (25.0)                          | 0 (0.0)         | 4 (4.2)  |
| Upper Hudson          | 3 (4.0)                           | 7 (9.9)                                                                          | 23 (32.4)                 | 23 (32.4)              | 17 (23.9)                          | 1 (1.4)         | 0 (0.0)  |
| Lake Champlain        |                                   |                                                                                  |                           |                        |                                    |                 |          |
| Lake George           | 4 (9.3)                           | 5 (12.8)                                                                         | 9 (23.1)                  | 10 (25.6)              | 15 (38.5)                          | 0 (0.0)         | 0 (0.0)  |
| Black River           |                                   |                                                                                  |                           |                        |                                    |                 |          |
| St. Lawrence          | 0 (0.0)                           | 1 (2.4)                                                                          | 18 (43.9)                 | 6 (14.6)               | 15 (36.6)                          | 1 (2.4)         | 0 (0.0)  |
| Upper Mohawk Valley   | 1 (3.6)                           | 1 (3.7)                                                                          | 9 (33.3)                  | 13 (48.1)              | 3 (11.1)                           | 0 (0.0)         | 1 (3.7)  |
| Central               | 0 (0.0)                           | 3 (6.8)                                                                          | 22 (50.0)                 | 9 (20.5)               | 6 (13.6)                           | 0 (0.0)         | 4 (9.1)  |
| Southern Tier East    | 4 (7.0)                           | 5 (9.4)                                                                          | 20 (37.7)                 | 18 (34.0)              | 9 (17.0)                           | 0 (0.0)         | 1 (1.8)  |
| Southern Tier Central | 0 (0.0)                           | 2 (1.1)                                                                          | 9 (50.0)                  | 5 (27.8)               | 2 (1.1)                            | 0 (0.0)         | 0 (0.0)  |
| Southern Tier West    | 0 (2.3)                           | 2 (4.8)                                                                          | 13 (31.0)                 | 20 (47.6)              | 7 (15.7)                           | 0 (0.0)         | 0 (0.0)  |
| Genesee               |                                   |                                                                                  |                           |                        |                                    |                 |          |
| Finger Lakes          | 0 (0.0)                           | 2 (3.1)                                                                          | 28 (43.8)                 | 18 (28.1)              | 12 (18.8)                          | 0 (0.0)         | 4 (6.3)  |
| Western               | 2 (4.5)                           | 3 (7.1)                                                                          | 15 (35.7)                 | 14 (33.3)              | 8 (19.0)                           | 0 (0.0)         | 2 (4.8)  |
| Total State           | 36 (5.1)                          | 38 (5.6)                                                                         | 238 (36.1)                | 200 (30.3)             | 158 (23.9)                         | 3 (0.5)         | 23 (3.5) |

TABLE 9E

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding in that Size) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 9 and Statewide.

| Enrollment Size | Course Not Offered or No Response | Science Discipline Emphasized in Grade 9<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-----------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                 |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| 1-749           | 8 (8.7)                           | 2 (2.4)                                                                          | 33 (39.3)                 | 19 (22.6)              | 24 (28.6)                          | 4 (4.8)         | 2 (2.4)  |
| 750-1,499       | 16 (9.5)                          | 4 (2.6)                                                                          | 59 (38.6)                 | 41 (26.8)              | 42 (27.5)                          | 5 (3.3)         | 2 (1.3)  |
| 1,500-3,499     | 17 (7.2)                          | 3 (1.4)                                                                          | 90 (41.1)                 | 55 (25.1)              | 62 (28.3)                          | 6 (2.7)         | 3 (1.4)  |
| 3,500-5,999     | 3 (3.8)                           | 2 (2.6)                                                                          | 34 (44.7)                 | 18 (23.7)              | 21 (27.6)                          | 1 (1.3)         | 0 (0.0)  |
| 6,000-9,999     | 6 (12.0)                          | 2 (4.5)                                                                          | 14 (31.8)                 | 10 (22.7)              | 15 (34.1)                          | 2 (4.5)         | 1 (2.3)  |
| 10,000-25,000   | 4 (11.4)                          | 0 (0.0)                                                                          | 16 (51.6)                 | 3 (9.7)                | 6 (19.4)                           | 3 (9.7)         | 3 (9.7)  |
| Over 25,000     | 0 (0.0)                           | 1 (2.8)                                                                          | 6 (16.7)                  | 3 (8.3)                | 25 (69.4)                          | 0 (0.0)         | 1 (2.8)  |
| Total State     | 54 (7.7)                          | 14 (2.2)                                                                         | 252 (39.2)                | 149 (23.2)             | 195 (30.3)                         | 21 (3.3)        | 12 (1.9) |

TABLE 9F

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Science Discipline Emphasized for the Majority of Students at Grade 9 and Statewide.

| New York State Region         | Course Not Offered or No Response | Science Discipline Emphasized in Grade 9<br>(Percent of Those That Offer Course) |                           |                        |                                    |                 |          |
|-------------------------------|-----------------------------------|----------------------------------------------------------------------------------|---------------------------|------------------------|------------------------------------|-----------------|----------|
|                               |                                   | Life Science Emphasis                                                            | Physical Science Emphasis | Earth Science Emphasis | Combination of Science Disciplines | Regents Courses | Other    |
| New York City                 | 0 (0.0)                           | 0 (0.0)                                                                          | 0 (0.0)                   | 0 (0.0)                | 23 (95.8)                          | 0 (0.0)         | 1 (4.2)  |
| Nassau-Suffolk                | 26 (21.8)                         | 0 (0.0)                                                                          | 36 (38.7)                 | 31 (33.3)              | 23 (24.7)                          | 3 (3.2)         | 0 (0.0)  |
| Mid-Hudson                    | 5 (5.1)                           | 5 (5.4)                                                                          | 36 (38.7)                 | 19 (20.4)              | 25 (26.9)                          | 5 (5.4)         | 3 (3.2)  |
| Upper Hudson                  | 8 (10.8)                          | 0 (0.0)                                                                          | 31 (47.0)                 | 13 (19.7)              | 19 (28.8)                          | 1 (1.5)         | 2 (3.0)  |
| Lake Champlain<br>Lake George | 5 (11.6)                          | 1 (2.6)                                                                          | 9 (23.7)                  | 9 (23.7)               | 17 (44.7)                          | 2 (5.3)         | 0 (0.0)  |
| Black River<br>St. Lawrence   | 0 (0.0)                           | 1 (2.4)                                                                          | 11 (26.8)                 | 10 (24.4)              | 17 (41.5)                          | 2 (4.9)         | 0 (0.0)  |
| Upper<br>Mohawk Valley        | 2 (7.1)                           | 0 (0.0)                                                                          | 15 (57.7)                 | 6 (23.1)               | 5 (19.2)                           | 0 (0.0)         | 0 (0.0)  |
| Central                       | 0 (0.0)                           | 1 (2.3)                                                                          | 11 (25.0)                 | 13 (29.5)              | 17 (38.6)                          | 1 (2.3)         | 1 (2.3)  |
| Southern<br>Tier East         | 4 (7.0)                           | 1 (1.9)                                                                          | 22 (41.5)                 | 15 (28.3)              | 13 (24.5)                          | 2 (3.7)         | 2 (3.7)  |
| Southern<br>Tier Central      | 0 (0.0)                           | 0 (0.0)                                                                          | 7 (38.9)                  | 5 (27.8)               | 4 (22.2)                           | 1 (5.6)         | 1 (5.6)  |
| Southern<br>Tier West         | 2 (4.6)                           | 0 (0.0)                                                                          | 25 (60.9)                 | 7 (17.1)               | 8 (19.5)                           | 1 (2.4)         | 0 (0.0)  |
| Genesee<br>Finger Lakes       | 2 (3.1)                           | 2 (3.2)                                                                          | 29 (46.8)                 | 14 (22.6)              | 13 (21.0)                          | 3 (4.8)         | 1 (1.6)  |
| Western                       | 2 (4.5)                           | 3 (7.1)                                                                          | 20 (47.6)                 | 7 (16.7)               | 11 (26.2)                          | 0 (0.0)         | 1 (2.4)  |
| Total State                   | 56 (8.0)                          | 14 (2.2)                                                                         | 252 (39.3)                | 149 (23.2)             | 195 (30.4)                         | 21 (3.3)        | 12 (1.9) |

TABLE 10

For Regents Courses the Number of School Districts Responding (Percent of Responding Total)  
 Indicating Need for Major Revision of Syllabus and Area or Unit Needing Revision.

| Course                      | No Major<br>Revision<br>Needed | Area or Unit That<br>Needs Major Revision<br>(Percent of Total Responding) |          |          |          |          |          |          |          |          |
|-----------------------------|--------------------------------|----------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
|                             |                                | <u>1</u>                                                                   | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> |          |          |          |          |
| Regents<br>Earth<br>Science | 427 (93.6)                     | 2 (0.4)                                                                    | 8 (1.8)  | 8 (1.8)  | 6 (1.3)  | 5 (1.1)  |          |          |          |          |
| Regents<br>Biology          | 560 (90.6)                     | <u>1</u>                                                                   | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> |          |          |
|                             |                                | 16 (2.5)                                                                   | 19 (3.1) | 5 (0.8)  | 2 (0.3)  | 1 (0.2)  | 4 (0.6)  | 1 (1.8)  |          |          |
| Regents<br>Chemistry        | 553 (89.3)                     | <u>1</u>                                                                   | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> |
|                             |                                | 3 (0.5)                                                                    | 13 (2.1) | 1 (0.2)  | 1 (0.2)  | 3 (0.5)  | 8 (1.3)  | 1 (0.2)  | 4 (0.6)  | 32 (5.2) |
| Regents<br>Physics          | 547 (90.1)                     | <u>1</u>                                                                   | <u>2</u> | <u>3</u> | <u>4</u> |          |          |          |          |          |
|                             |                                | 12 (2.0)                                                                   | 4 (0.7)  |          |          | 20 (3.3) |          |          | 24 (4.0) |          |

TABLE 11

For Special Science Courses the Number of School Districts Responding (Percent of Responding Total) Indicating If the Course is Offered or if so the Duration of the Course.

| Courses                   | Course Not Offered | Duration of Course |            |            |                       |
|---------------------------|--------------------|--------------------|------------|------------|-----------------------|
|                           |                    | Full Year          | Semester   | Minicourse | Individualized Course |
| Consumer Science          | 625 (89.7)         | 8 (1.1)            | 20 (2.9)   | 19 (2.7)   | 11 (1.6)              |
| Metric System             | 541 (77.6)         | 9 (1.3)            | 4 (0.6)    | 97 (13.9)  | 42 (6.0)              |
| Environmental Education   | 396 (56.8)         | 65 (9.3)           | 109 (15.6) | 90 (12.9)  | 37 (5.3)              |
| Space Science             | 561 (80.5)         | 13 (1.9)           | 28 (4.0)   | 62 (8.9)   | 20 (2.9)              |
| General Earth Science     | 545 (78.2)         | 102 (14.6)         | 13 (1.9)   | 9 (1.3)    | 6 (0.9)               |
| Marine Biology            | 595 (85.4)         | 16 (2.3)           | 35 (5.0)   | 38 (5.5)   | 5 (0.7)               |
| Technology & Society      | 635 (91.1)         | 16 (2.3)           | 10 (1.4)   | 17 (2.4)   | 5 (0.7)               |
| Interdisciplinary Science | 605 (86.8)         | 44 (6.3)           | 9 (1.3)    | 12 (1.7)   | 11 (1.6)              |
| Other                     | 20 (2.9)           | 40 (5.7)           | 72 (10.3)  | 16 (2.3)   | 9 (1.3)               |

TABLE 12 A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding In That Size) Indicating the Need for Curriculum Materials in Special Science Courses.

| Enrollment Size | Curricula Materials Are Needed For |               |                         |               |                       |                |                      |                           |
|-----------------|------------------------------------|---------------|-------------------------|---------------|-----------------------|----------------|----------------------|---------------------------|
|                 | Consumer Science                   | Metric System | Environmental Education | Space Science | General Earth Science | Marine Biology | Technology & Society | Interdisciplinary Science |
| 1 - 749         | 28 (30.4)                          | 41 (44.6)     | 36 (39.1)               | 20 (21.7)     | 16 (17.4)             | 19 (20.7)      | 18 (19.6)            | 23 (25.0)                 |
| 750 - 1499      | 66 (39.1)                          | 91 (53.8)     | 87 (51.5)               | 46 (27.2)     | 37 (21.9)             | 54 (22.0)      | 53 (31.4)            | 57 (33.7)                 |
| 1500 - 3499     | 77 (32.6)                          | 104 (44.1)    | 109 (46.2)              | 66 (28.0)     | 36 (15.3)             | 71 (30.1)      | 65 (27.5)            | 62 (26.3)                 |
| 3500 - 5999     | 37 (46.8)                          | 42 (53.2)     | 40 (50.6)               | 29 (36.7)     | 21 (26.6)             | 34 (43.0)      | 33 (41.4)            | 27 (34.2)                 |
| 6000 - 9999     | 23 (46.0)                          | 30 (60.0)     | 23 (46.0)               | 16 (32.0)     | 15 (30.0)             | 21 (42.0)      | 19 (38.0)            | 22 (44.0)                 |
| 10,000 - 25,000 | 16 (45.7)                          | 20 (57.1)     | 12 (34.3)               | 7 (20.0)      | 8 (22.9)              | 13 (37.1)      | 15 (42.9)            | 9 (25.7)                  |
| Over 25,000     | 26 (72.2)                          | 28 (77.7)     | 25 (69.4)               | 18 (50.0)     | 12 (33.3)             | 21 (58.3)      | 20 (55.5)            | 23 (63.9)                 |
| Total State     | 273 (39.2)                         | 356 (51.1)    | 332 (47.6)              | 202 (29.0)    | 145 (20.8)            | 233 (33.4)     | 223 (32.0)           | 223 (32.0)                |

TABLE 12 B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Need for Curriculum Materials in Special Science Courses.

| New York State Regions     | Curricula Materials Are Needed For |               |                         |               |                       |                |                      |                           |
|----------------------------|------------------------------------|---------------|-------------------------|---------------|-----------------------|----------------|----------------------|---------------------------|
|                            | Consumer Science                   | Metric System | Environmental Education | Space Science | General Earth Science | Marine Biology | Technology & Society | Interdisciplinary Science |
| New York City              | 13 (54.2)                          | 18 (75.0)     | 15 (62.5)               | 12 (50.0)     | 5 (20.8)              | 13 (54.2)      | 14 (58.3)            | 16 (66.7)                 |
| Nassau-Suffolk             | 40 (33.6)                          | 57 (47.9)     | 58 (48.7)               | 28 (23.5)     | 26 (21.8)             | 52 (43.7)      | 38 (31.9)            | 37 (31.1)                 |
| Mid-Hudson                 | 37 (37.8)                          | 46 (46.9)     | 49 (50.0)               | 32 (32.7)     | 22 (22.4)             | 35 (35.7)      | 32 (32.7)            | 38 (38.9)                 |
| Upper Hudson               | 30 (40.5)                          | 35 (47.3)     | 30 (40.5)               | 18 (24.3)     | 10 (13.5)             | 18 (24.3)      | 19 (25.7)            | 22 (29.7)                 |
| Lake Champlain-Lake George | 15 (34.9)                          | 20 (46.5)     | 25 (58.1)               | 13 (30.2)     | 6 (14.0)              | 13 (30.2)      | 12 (27.9)            | 12 (27.9)                 |
| Black River St. Lawrence   | 14 (34.1)                          | 19 (46.3)     | 17 (41.5)               | 9 (22.0)      | 4 (9.8)               | 9 (22.0)       | 11 (26.9)            | 9 (22.0)                  |
| Upper Mohawk Valley        | 10 (35.7)                          | 13 (46.4)     | 12 (42.9)               | 8 (28.6)      | 7 (25.0)              | 7 (25.0)       | 8 (28.6)             | 7 (25.0)                  |
| Central                    | 19 (43.2)                          | 21 (47.7)     | 17 (38.6)               | 14 (31.8)     | 7 (15.9)              | 13 (29.5)      | 15 (34.1)            | 12 (27.3)                 |
| Southern Tier East         | 16 (28.1)                          | 29 (50.9)     | 29 (50.9)               | 16 (28.1)     | 13 (22.8)             | 18 (31.6)      | 15 (26.3)            | 13 (22.8)                 |
| Southern Tier Central      | 10 (55.6)                          | 10 (55.6)     | 8 (44.4)                | 6 (33.3)      | 7 (38.9)              | 8 (44.4)       | 8 (44.4)             | 5 (27.8)                  |
| Southern Tier West         | 14 (32.6)                          | 24 (55.8)     | 18 (41.9)               | 10 (23.2)     | 8 (18.6)              | 8 (18.6)       | 13 (30.2)            | 13 (30.2)                 |
| Tenesees Finger Lakes      | 29 (45.3)                          | 37 (57.8)     | 34 (53.1)               | 21 (32.8)     | 15 (23.4)             | 23 (35.9)      | 22 (34.4)            | 23 (35.9)                 |
| Western                    | 23 (52.3)                          | 27 (61.4)     | 20 (45.4)               | 15 (34.1)     | 15 (34.1)             | 16 (36.4)      | 16 (36.4)            | 16 (36.4)                 |
| Total States               | 273 (39.2)                         | 356 (51.1)    | 332 (47.6)              | 202 (29.0)    | 145 (20.8)            | 233 (33.4)     | 223 (33.4)           | 223 (33.4)                |

TABLE 13

For Special Science Courses or Levels the Number of School Districts Responding (Percent of Responding Total) Indicating if Specific Educational Techniques or Activities are Practiced.

| Techniques and Activities             | Not Practiced In District | Techniques and Activities Practiced At |            |            |               |           |           |           |         |
|---------------------------------------|---------------------------|----------------------------------------|------------|------------|---------------|-----------|-----------|-----------|---------|
|                                       |                           | Grades K-3                             | Grades 4-6 | Grades 7-9 | Earth Science | Chemistry | Biology   | Physics   | Other   |
| 1. Departmentalization                | 131(18.8)                 | 35 (5.0)                               | 261(37.4)  | 475(68.1)  | 297(42.7)     | 363(52.1) | 372(53.4) | 361(51.8) | 66(9.5) |
| 2. Standardized Achievement Test      | 242(34.7)                 | 209(30.0)                              | 290(41.6)  | 247(35.4)  | 108(15.5)     | 155(22.2) | 144(20.7) | 135(19.4) | 14(2.0) |
| 3. Laboratory Performing Testing      | 207(29.7)                 | 33 (4.7)                               | 77(11.0)   | 231(33.1)  | 329(47.2)     | 279(40.0) | 262(37.6) | 237(34.0) | 29(4.2) |
| 4. Affective Testing                  | 495(71.0)                 | 59 (8.5)                               | 75(10.8)   | 124(17.8)  | 79(11.3)      | 86(12.3)  | 95(13.6)  | 82(11.8)  | 14(2.0) |
| 5. Ability Grouping                   | 178(25.5)                 | 68 (9.8)                               | 137(19.7)  | 377(54.1)  | 255(36.6)     | 304(43.6) | 310(44.5) | 256(36.7) | 23(3.3) |
| 6. Inter-age Grouping                 | 446(64.0)                 | 100(14.3)                              | 100(14.3)  | 56 (8.0)   | 81(11.6)      | 114(16.4) | 103(14.8) | 100(14.3) | 20(2.9) |
| 7. Multi-disciplinary Learning        | 434(62.3)                 | 148(21.2)                              | 164(23.5)  | 133(19.1)  | 27 (3.9)      | 25 (3.6)  | 26 (3.7)  | 25 (3.6)  | 26(3.7) |
| 8. Open Plan School Building          | 574(82.4)                 | 82(11.8)                               | 77(11.0)   | 36 (5.2)   | 11 (1.6)      | 14 (2.0)  | 13 (1.9)  | 12 (1.7)  | 2(0.3)  |
| 9. Open Classroom(s) Techniques       | 387(55.5)                 | 219(31.4)                              | 197(28.3)  | 80(11.5)   | 22 (3.2)      | 18 (2.6)  | 18 (2.6)  | 22 (3.2)  | 13(1.9) |
| 10. Pupil Performance Contracting     | 440(63.1)                 | 53 (7.6)                               | 113(16.2)  | 103(14.8)  | 20 (2.9)      | 28 (4.0)  | 34 (4.9)  | 40 (5.7)  | 20(2.9) |
| 11. Individualized Instruction        | 216(31.0)                 | 246(35.3)                              | 293(42.0)  | 274(39.3)  | 107(15.4)     | 137(19.7) | 141(20.2) | 130(18.7) | 39(5.6) |
| 12. Learning Activity Packages (LAPs) | 490(70.3)                 | 60 (8.6)                               | 104(14.9)  | 105(15.1)  | 27 (3.9)      | 29 (4.2)  | 41 (5.9)  | 17 (2.4)  | 17(2.4) |
| 13. Mini-courses                      | 449(64.4)                 | 34 (4.9)                               | 67 (9.6)   | 135(19.4)  | 27 (3.9)      | 20 (2.9)  | 42 (6.0)  | 24 (3.4)  | 39(5.6) |
| 14. Programmed Materials              | 420(60.3)                 | 72(10.3)                               | 106(15.2)  | 127(18.2)  | 38 (5.5)      | 72(10.3)  | 77(11.0)  | 50 (7.2)  | 11(1.6) |

TABLE 13 (Cont'd)

| Techniques and Activities                                 | Not Practiced In District | Techniques and Activities Practiced At |            |            |               |           |           |           |         |
|-----------------------------------------------------------|---------------------------|----------------------------------------|------------|------------|---------------|-----------|-----------|-----------|---------|
|                                                           |                           | Grades K-3                             | Grades 4-6 | Grades 7-9 | Earth Science | Chemistry | Biology   | Physics   | Other   |
| 15. Science Resource Centers                              | 433(62.1)                 | 109(15.6)                              | 139(19.9)  | 104(14.9)  | 76(10.9)      | 101(14.5) | 108(15.5) | 96(13.8)  | 34(4.9) |
| 16. Independent Study                                     | 321(46.1)                 | 62 (8.9)                               | 116(16.6)  | 134(19.2)  | 76(10.9)      | 123(17.6) | 158(22.7) | 133(19.1) | 66(9.5) |
| 17. Open Scheduling                                       | 637(91.4)                 | 18 (2.6)                               | 26 (3.7)   | 16 (2.3)   | 10 (1.4)      | 16 (2.3)  | 16 (2.3)  | 20 (2.9)  | 1(0.1)  |
| 18. Modular Scheduling                                    | 573(82.2)                 | 7 (1.0)                                | 25 (3.6)   | 85(12.2)   | 46 (6.6)      | 66 (9.5)  | 67 (9.6)  | 67 (9.6)  | 16(2.3) |
| 19. Team Teaching                                         | 392(56.2)                 | 106(15.2)                              | 181(26.0)  | 145(20.8)  | 15 (2.2)      | 33 (4.7)  | 44 (6.3)  | 8 (1.1)   | 29(4.2) |
| 20. Differentiated Staffing                               | 612(87.8)                 | 38 (5.5)                               | 53 (7.6)   | 41 (5.9)   | 14 (2.0)      | 19 (2.7)  | 22 (3.2)  | 18 (2.6)  | 0(0.0)  |
| 21. House Plan                                            | 648(93.0)                 | 2 (0.3)                                | 5 (0.7)    | 30 (4.3)   | 8 (1.1)       | 9 (1.3)   | 10 (1.4)  | 9 (1.3)   | 4(0.6)  |
| 22. Parent Volunteers                                     | 503(72.2)                 | 150(21.5)                              | 145(20.8)  | 45 (6.5)   | 4 (0.6)       | 2 (0.3)   | 4 (0.6)   | 2 (0.3)   | 5(0.7)  |
| 23. Educational T.V.                                      | 321(46.1)                 | 267(38.3)                              | 272(39.0)  | 200(28.7)  | 109(15.6)     | 108(15.5) | 135(19.4) | 101(14.5) | 30(4.3) |
| 24. Science Clubs                                         | 336(48.2)                 | 31 (4.4)                               | 105(15.1)  | 227(32.6)  | 66 (9.5)      | 70(10.0)  | 104(14.9) | 65 (9.3)  | 64(9.2) |
| 25. Science Fairs                                         | 432(62.0)                 | 103(14.8)                              | 177(25.4)  | 162(23.2)  | 47 (6.7)      | 50 (7.2)  | 53 (7.6)  | 47 (6.7)  | 19(2.7) |
| 26. Professional Laboratory Assistants                    | 624(89.5)                 | 2 (0.3)                                | 3 (0.4)    | 39 (5.6)   | 27 (3.9)      | 37 (5.3)  | 37 (5.3)  | 32 (4.6)  | 12(1.7) |
| 27. Student Laboratory Assistants                         | 437(62.7)                 | 6 (0.9)                                | 17 (2.4)   | 116(16.6)  | 62 (8.9)      | 137(19.7) | 142(20.4) | 93(13.3)  | 16(2.3) |
| 28. Bilingual Science Program                             | 674(96.7)                 | 10 (1.4)                               | 10 (1.4)   | 14 (2.0)   | 0 (0.0)       | 1 (0.1)   | 3 (0.4)   | 0 (0.0)   | 0(0.0)  |
| 29. Community Professionals in Science Related Activities | 497(71.3)                 | 67 (9.6)                               | 82(11.8)   | 91(13.1)   | 50 (7.2)      | 57 (8.2)  | 82(11.8)  | 55 (7.9)  | 26(3.7) |

TABLE 14

For Elementary Levels the Number of School Districts Responding (Percent of Responding Total) Indicating the Type Facilities Used for Teaching Science to the Majority of Students in Elementary Grades.

| Elementary Level | Majority of Students Taught Science In |                         |           |
|------------------|----------------------------------------|-------------------------|-----------|
|                  | Regular Classrooms Only                | Science Classrooms Only | Other     |
| Primary          | 638 (92.7)                             | 11 (1.6)                | 40 (5.8)  |
| Intermediate     | 477 (69.5)                             | 125 (18.2)              | 84 (12.2) |

TABLE 15

For Specific Levels the Number of School Districts Responding (Percent of Responding Total) Indicating if Specific Facilities Are Available and Used Outside of or Within the District.

| Facility           | Facility Not Available | Facilities Available and Used for Indicated Grade Level |            |            |            |                     |            |            |            |
|--------------------|------------------------|---------------------------------------------------------|------------|------------|------------|---------------------|------------|------------|------------|
|                    |                        | Outside the District                                    |            |            |            | Within the District |            |            |            |
|                    |                        | K-3                                                     | 4-6        | 7-9        | 10-12      | K-3                 | 4-6        | 7-9        | 10-12      |
| Planetarium        | 275 (39.5)             | 220 (31.6)                                              | 318 (45.6) | 280 (40.2) | 204 (29.3) | 45 (6.5)            | 51 (7.3)   | 56 (8.0)   | 50 (7.2)   |
| Nature Trails      | 169 (24.2)             | 224 (32.1)                                              | 282 (40.5) | 207 (29.7) | 157 (22.5) | 199 (28.6)          | 218 (31.3) | 207 (29.7) | 189 (27.1) |
| Overnight Camp     | 467 (67.0)             | 37 (5.3)                                                | 142 (20.4) | 87 (12.5)  | 54 (7.7)   | 17 (2.4)            | 31 (4.4)   | 28 (4.0)   | 22 (3.2)   |
| Large Lecture Room | 331 (47.5)             | 20 (2.9)                                                | 35 (5.0)   | 36 (5.2)   | 30 (4.3)   | 73 (10.5)           | 105 (15.1) | 218 (31.3) | 255 (36.6) |
| Darkroom           | 208 (29.8)             | 14 (2.0)                                                | 22 (3.2)   | 50 (7.2)   | 49 (7.0)   | 32 (4.6)            | 65 (9.3)   | 303 (43.5) | 386 (55.4) |
| Museum (Science)   | 348 (49.9)             | 225 (32.3)                                              | 267 (38.3) | 232 (33.3) | 182 (26.1) | 21 (3.0)            | 26 (3.7)   | 28 (4.0)   | 23 (3.3)   |
| Greenhouse         | 457 (65.6)             | 73 (10.5)                                               | 70 (10.0)  | 62 (8.9)   | 44 (6.3)   | 36 (5.2)            | 40 (5.7)   | 76 (10.9)  | 120 (17.2) |
| Observatory        | 544 (78.0)             | 63 (9.0)                                                | 78 (11.2)  | 94 (13.5)  | 81 (11.6)  | 7 (1.0)             | 9 (1.8)    | 16 (2.3)   | 17 (2.4)   |
| Resource Center    | 322 (46.2)             | 78 (11.2)                                               | 95 (13.6)  | 96 (13.8)  | 72 (10.3)  | 133 (19.1)          | 151 (21.7) | 188 (27.0) | 205 (29.4) |
| Aircraft           | 563 (80.8)             | 77 (11.0)                                               | 77 (11.0)  | 51 (7.3)   | 45 (6.5)   | 9 (1.3)             | 10 (1.4)   | 15 (2.2)   | 15 (2.2)   |
| Boats              | 550 (78.9)             | 55 (7.9)                                                | 59 (8.5)   | 55 (7.9)   | 49 (7.0)   | 25 (3.6)            | 29 (4.2)   | 27 (3.9)   | 37 (5.3)   |
| Other              | 23 (3.3)               | 10 (1.4)                                                | 16 (2.3)   | 8 (1.1)    | 5 (0.7)    | 14 (2.0)            | 13 (1.9)   | 17 (2.4)   | 14 (2.0)   |

TABLE 16A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding In That Size) Indicating the Frequency Per Year That Administrators and Supervisors Observe Tenured and Non-Tenured Science Teachers Grades 7-12.

| Enrollment Size | Frequency Per Year of Observations by Administrators and Supervisors of Science Teachers (7-12) |            |            |                    |             |          |            |                    |
|-----------------|-------------------------------------------------------------------------------------------------|------------|------------|--------------------|-------------|----------|------------|--------------------|
|                 | Tenured                                                                                         |            |            |                    | Non-Tenured |          |            |                    |
|                 | <u>0</u>                                                                                        | <u>1</u>   | <u>2-4</u> | <u>More than 4</u> | <u>0</u>    | <u>1</u> | <u>2-4</u> | <u>More than 4</u> |
| 1-749           | 14 (15.2)                                                                                       | 37 (40.2)  | 34 (37.0)  | 5 (5.4)            | 7 (7.6)     | 6 (6.5)  | 53 (57.6)  | 24 (26.1)          |
| 750-1,499       | 29 (17.2)                                                                                       | 64 (37.9)  | 60 (35.5)  | 9 (5.3)            | 12 (7.1)    | 3 (1.8)  | 100 (59.2) | 47 (27.3)          |
| 1,500-3,499     | 38 (16.1)                                                                                       | 91 (38.6)  | 79 (33.5)  | 21 (8.9)           | 15 (6.4)    | 4 (1.7)  | 127 (53.8) | 83 (35.2)          |
| 3,500-5,999     | 8 (10.1)                                                                                        | 29 (36.7)  | 34 (43.0)  | 7 (8.9)            | 1 (1.3)     | 0 (0.0)  | 48 (60.8)  | 29 (36.7)          |
| 6,000-9,999     | 9 (18.0)                                                                                        | 17 (34.0)  | 18 (36.0)  | 2 (4.0)            | 3 (6.0)     | 0 (0.0)  | 24 (48.0)  | 19 (38.0)          |
| 10,000-25,000   | 4 (11.4)                                                                                        | 12 (34.3)  | 16 (45.7)  | 1 (2.9)            | 2 (5.7)     | 0 (0.0)  | 18 (51.4)  | 13 (37.1)          |
| Over 25,000     | 5 (13.9)                                                                                        | 14 (38.9)  | 15 (41.7)  | 2 (5.6)            | 1 (2.8)     | 0 (0.0)  | 21 (58.3)  | 14 (38.9)          |
| Total State     | 107 (15.4)                                                                                      | 264 (37.9) | 256 (36.7) | 47 (6.7)           | 41 (5.9)    | 13 (1.9) | 391 (56.1) | 229 (32.9)         |

TABLE 16B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region)  
 Indicating the Frequency Per Year That Administrators and Supervisors Observe Tenured and Non-Tenured  
 Science Teachers Grades 7-12.

| Region                     | Frequency Per Year of Observations by Administrators and Supervisors of Science Teachers (7-12) |            |            |             |             |          |            |             |
|----------------------------|-------------------------------------------------------------------------------------------------|------------|------------|-------------|-------------|----------|------------|-------------|
|                            | Tenured                                                                                         |            |            |             | Non-Tenured |          |            |             |
|                            | 0                                                                                               | 1          | 2-4        | More Than 4 | 0           | 1        | 2-4        | More Than 4 |
| New York City              | 0 (0.0)                                                                                         | 10 (41.7)  | 13 (54.2)  | 1 (4.2)     | 0 (0.0)     | 0 (0.0)  | 14 (58.3)  | 10 (41.7)   |
| Nassau-Suffolk             | 6 (5.0)                                                                                         | 25 (21.0)  | 60 (50.4)  | 12 (10.1)   | 5 (4.2)     | 0 (0.0)  | 33 (27.7)  | 65 (54.6)   |
| Mid-Hudson                 | 15 (15.3)                                                                                       | 39 (39.8)  | 36 (36.7)  | 7 (7.1)     | 2 (2.0)     | 0 (0.0)  | 52 (53.1)  | 43 (43.9)   |
| Upper Hudson               | 13 (17.6)                                                                                       | 27 (36.5)  | 24 (32.4)  | 8 (10.8)    | 4 (5.4)     | 0 (0.0)  | 48 (64.9)  | 20 (27.0)   |
| Lake Champlain-Lake George | 14 (32.6)                                                                                       | 14 (32.6)  | 11 (25.6)  | 2 (4.7)     | 8 (18.6)    | 3 (7.0)  | 25 (58.1)  | 5 (11.6)    |
| Black River-St. Lawrence   | 12 (29.3)                                                                                       | 14 (34.1)  | 15 (36.6)  | 0 (0.0)     | 4 (9.8)     | 3 (7.3)  | 27 (65.9)  | 7 (17.1)    |
| Upper Mohawk Valley        | 4 (14.3)                                                                                        | 12 (42.9)  | 10 (35.7)  | 1 (3.6)     | 2 (7.1)     | 1 (3.6)  | 20 (71.4)  | 4 (14.3)    |
| Central                    | 4 (9.1)                                                                                         | 15 (34.1)  | 24 (54.5)  | 1 (2.3)     | 1 (2.3)     | 0 (0.0)  | 24 (54.5)  | 19 (43.2)   |
| Southern Tier East         | 5 (8.8)                                                                                         | 32 (56.1)  | 16 (28.1)  | 4 (7.0)     | 3 (5.3)     | 3 (5.3)  | 35 (61.4)  | 16 (28.1)   |
| Southern Tier Central      | 3 (16.7)                                                                                        | 12 (66.7)  | 3 (16.7)   | 0 (0.0)     | 1 (5.6)     | 0 (0.0)  | 15 (83.3)  | 2 (11.1)    |
| Southern Tier West         | 9 (20.9)                                                                                        | 17 (39.5)  | 15 (34.9)  | 2 (4.7)     | 2 (4.7)     | 3 (7.0)  | 30 (69.8)  | 8 (18.6)    |
| Genesee-Finger Lakes       | 11 (17.2)                                                                                       | 29 (45.3)  | 17 (26.6)  | 7 (10.9)    | 5 (7.8)     | 0 (0.0)  | 44 (68.8)  | 15 (23.4)   |
| Western                    | 11 (25.0)                                                                                       | 18 (40.9)  | 12 (27.3)  | 2 (4.5)     | 4 (9.1)     | 0 (0.0)  | 24 (54.5)  | 15 (34.1)   |
| Total State                | 107 (15.4)                                                                                      | 264 (37.9) | 256 (36.7) | 47 (6.7)    | 41 (5.9)    | 13 (1.9) | 391 (56.1) | 229 (32.9)  |

TABLE 17

For Tenured and Non-Tenured Science Teachers The Number of School Districts Responding (Percent of Responding Total) Indicating the Types of Devices That Are Used in Teacher Evaluation.

| Teacher Evaluation Devices Used                      | With Tenured<br>Science Teachers | With Non-Tenured<br>Science Teachers |
|------------------------------------------------------|----------------------------------|--------------------------------------|
| 1. No Formal Instruments Used                        | 126 (18.1)                       | 48 (6.9)                             |
| 2. Formal Check List Without Space<br>For Comments   | 25 (3.6)                         | 28 (4.0)                             |
| 3. Formal Check List With Space For<br>Comments      | 344 (49.4)                       | 423 (60.7)                           |
| 4. Remarks In Essay Form Only                        | 237 (34.0)                       | 266 (38.2)                           |
| 5. Interviews (Pre and/or Post<br>Class Observation) | 474 (68.0)                       | 549 (78.8)                           |
| 6. Video Taping Is Sometimes Used                    | 88 (12.6)                        | 108 (15.5)                           |
| 7. Other Devices                                     | 40 (5.7)                         | 51 (7.3)                             |

TABLE 18

For District Science Coordinators and Building Chairman in Junior High-Middle School and Senior High the Number of School Districts Responding (Percent of Responding Total) Indicating That Person(s) Who Has Operational Responsibility for Performing Certain Tasks.

| Tasks                                                        | District<br>Science<br>Coordinator | Building<br>Chairman Junior<br>High-Middle<br>School | Building<br>Chairman<br>Senior High |
|--------------------------------------------------------------|------------------------------------|------------------------------------------------------|-------------------------------------|
| Position Does Not Exist                                      | 571 (81.9)                         | 363 (52.1)                                           | 301 (43.2)                          |
| 1. Interview Science Teacher Candidates                      | 100 (14.3) ( )                     | 271 (38.9)                                           | 335 (48.1)                          |
| 2. Observe Science Lessons                                   | 95 (13.6)                          | 260 (37.3)                                           | 315 (45.2)                          |
| 3. Submit Formal Observation Reports                         | 76 (10.9)                          | 215 (30.8)                                           | 269 (38.6)                          |
| 4. Have Pre-Class Interviews                                 | 71 (10.2)                          | 177 (25.4)                                           | 211 (30.3)                          |
| 5. Have Post Class Interviews                                | 80 (11.5)                          | 223 (32.0)                                           | 269 (38.6)                          |
| 6. Makes Recommendations                                     | 109 (15.6)                         | 296 (42.5)                                           | 356 (51.4)                          |
| 7. Assists in Scheduling Teachers                            | 76 (10.9)                          | 240 (34.4)                                           | 322 (46.2)                          |
| 8. Assists in Scheduling Rooms                               | 63 (9.0)                           | 210 (30.1)                                           | 283 (40.6)                          |
| 9. Submits Orders for Textbooks                              | 84 (12.1)                          | 287 (41.2)                                           | 348 (49.9)                          |
| 10. Organizes Department Budget                              | 86 (12.3)                          | 288 (41.3)                                           | 358 (51.4)                          |
| 11. Inventories Textbooks & Materials                        | 64 (9.2)                           | 264 (37.9)                                           | 317 (45.5)                          |
| 12. Curriculum Revision & Development                        | 111 (15.9)                         | 288 (41.3)                                           | 342 (49.1)                          |
| 13. Member District Curriculum Council                       | 70 (10.0)                          | 109 (15.6)                                           | 125 (17.9)                          |
| 14. Organizes In-Service Workshops                           | 98 (14.1)                          | 117 (16.8)                                           | 142 (20.4)                          |
| 15. Conducts In-Service Workshops                            | 87 (12.5)                          | 96 (13.8)                                            | 111 (15.9)                          |
| 16. Conducts Safety Review of Facilities                     | 82 (11.8)                          | 233 (33.4)                                           | 269 (38.6)                          |
| 17. Conducts Department Meetings                             | 91 (13.1)                          | 304 (43.6)                                           | 367 (52.7)                          |
| 18. Schedules Department Meetings                            | 91 (13.1)                          | 294 (42.2)                                           | 358 (51.4)                          |
| 19. Attends National & State Meetings                        | 92 (13.2)                          | 243 (34.9)                                           | 297 (42.6)                          |
| 20. Resource Person to Staff                                 | 110 (15.8)                         | 246 (35.3)                                           | 301 (43.2)                          |
| 21. Construct Districtwide Examinations                      | 45 (6.5)                           | 47 (6.7)                                             | 51 (7.3)                            |
| 22. Plans for Building Renovations                           | 76 (10.9)                          | 194 (27.8)                                           | 253 (36.3)                          |
| 23. Teacher Observations & Reports                           | 84 (12.1)                          | 233 (33.4)                                           | 297 (42.6)                          |
| 24. Periodic Evaluation of Programs                          | 113 (16.2)                         | 276 (39.6)                                           | 331 (47.5)                          |
| 25. Evaluate New Programs                                    | 115 (16.5)                         | 274 (39.3)                                           | 332 (47.6)                          |
| 26. Evaluate New Equipment                                   | 108 (15.5)                         | 264 (37.9)                                           | 319 (45.8)                          |
| 27. Public Relations                                         | 100 (14.3)                         | 219 (31.4)                                           | 256 (36.7)                          |
| 28. Conducts Information Sessions                            | 102 (14.6)                         | 216 (31.0)                                           | 252 (36.2)                          |
| 29. Active in Nat'l, State, Regional<br>Science Organization | 92 (13.2)                          | 205 (29.4)                                           | 271 (38.9)                          |
| 30. Contacts State Education Department                      | 101 (14.5)                         | 202 (29.0)                                           | 288 (41.3)                          |

TABLE 19A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding In That Size) Indicating That District Science Coordinator and Building Chairman Do Receive Extra Pay For Being Science Supervisors.

| Enrollment<br>Size | District Science<br>Coordinator |                       | Building Chairman<br>Junior High-Middle School |                       | Building Chairman<br>Senior High |                       |
|--------------------|---------------------------------|-----------------------|------------------------------------------------|-----------------------|----------------------------------|-----------------------|
|                    | Position Does<br>Not Exist      | Receives<br>Extra Pay | Position Does<br>Not Exist                     | Receives<br>Extra Pay | Position Does<br>Not Exist       | Receives<br>Extra Pay |
| 1 - 1749           | 83 (90.2)                       | 8 (88.9)              | 63 (68.5)                                      | 25 (86.1)             | 54 (58.7)                        | 31 (81.6)             |
| 750 - 1499         | 142 (84.0)                      | 22 (81.5)             | 103 (60.9)                                     | 51 (77.3)             | 80 (47.3)                        | 70 (78.7)             |
| 1500 - 3499        | 197 (83.5)                      | 33 (84.6)             | 120 (50.8)                                     | 100 (79.6)            | 86 (36.4)                        | 131 (87.3)            |
| 3500 - 5999        | 66 (83.5)                       | 11 (84.6)             | 35 (53.0)                                      | 39 (97.5)             | 28 (35.4)                        | 48 (94.1)             |
| 6000 - 9999        | 37 (74.0)                       | 12 (92.3)             | 22 (44.0)                                      | 25 (89.3)             | 16 (32.0)                        | 32 (94.1)             |
| 10000 - 25000      | 29 (82.9)                       | 6 (100.0)             | 14 (40.0)                                      | 15 (71.4)             | 14 (40.0)                        | 18 (85.7)             |
| over - 25000       | 17 (47.2)                       | 5 (26.3)              | 6 (16.7)                                       | 21 (70.0)             | 23 (63.9)                        | 12 (92.3)             |
| Total State        | 571 (81.9)                      | 97 (75.8)             | 363 (52.1)                                     | 276 (82.6)            | 301 (43.2)                       | 342 (86.4)            |

TABLE 19B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating That District Science Coordinator and Building Chairman Do Receive Extra Pay For Being Science Supervisors.

|                               | District Science Coordinator |                       | Building Chairman<br>Junior High-Middle School |                       | Building Chairman<br>Senior High |                       |
|-------------------------------|------------------------------|-----------------------|------------------------------------------------|-----------------------|----------------------------------|-----------------------|
|                               | Position Does<br>Not Exist   | Receives<br>Extra Pay | Position Does<br>Not Exist                     | Receives<br>Extra Pay | Position Does<br>Not Exist       | Receives<br>Extra Pay |
| New York City                 | 9 (37.5)                     | 1 (4.2)               | 2 (8.3)                                        | 14 (58.3)             | *                                | *                     |
| Nassau-Suffolk                | 91 (76.5)                    | 25 (21.0)             | 50 (42.0)                                      | 69 (58.0)             | 40 (33.6)                        | 79 (66.4)             |
| Mid-Hudson                    | 75 (76.5)                    | 22 (22.4)             | 47 (48.0)                                      | 43 (43.9)             | 32 (32.7)                        | 59 (60.2)             |
| Upper Hudson                  | 67 (90.5)                    | 6 (8.1)               | 43 (58.1)                                      | 28 (37.8)             | 31 (31.9)                        | 40 (54.1)             |
| Lake Champlain-Lake<br>George | 39 (90.7)                    | 2 (4.7)               | 37 (86.0)                                      | 2 (4.7)               | 33 (76.7)                        | 4 (9.3)               |
| Black River-<br>St. Lawrence  | 37 (90.2)                    | 1 (2.4)               | 29 (70.7)                                      | 6 (14.6)              | 23 (56.1)                        | 9 (22.0)              |
| Upper Mohawk Valley           | 26 (92.9)                    | 1 (3.6)               | 15 (53.6)                                      | 12 (42.9)             | 12 (42.9)                        | 16 (57.1)             |
| Central                       | 33 (75.0)                    | 11 (25.0)             | 22 (50.0)                                      | 17 (38.6)             | 15 (34.1)                        | 24 (54.5)             |
| Southern Tier-East            | 52 (91.2)                    | 5 (8.8)               | 37 (64.9)                                      | 17 (29.8)             | 34 (59.6)                        | 20 (35.1)             |
| Southern Tier-Central         | 15 (83.3)                    | 3 (16.7)              | 10 (55.6)                                      | 4 (22.2)              | 8 (44.4)                         | 6 (33.3)              |
| Southern Tier-West            | 42 (97.7)                    | 1 (2.3)               | 27 (62.8)                                      | 13 (30.2)             | 22 (51.2)                        | 16 (37.2)             |
| Genesee-Finger Lakes          | 49 (76.6)                    | 12 (18.8)             | 29 (45.3)                                      | 30 (46.9)             | 17 (26.6)                        | 40 (62.5)             |
| Western                       | 36 (81.8)                    | 7 (15.9)              | 15 (34.1)                                      | 21 (47.7)             | 14 (31.8)                        | 25 (56.8)             |
| Total                         | 571 (81.9)                   | 97 (13.9)             | 363 (52.1)                                     | 276 (39.6)            | 301 (43.2)                       | 342 (49.1)            |

\* N.Y.C. H.S. Treated As A Unit.

TABLE 20

The Number of School Districts Responding (Percent of Statewide Responding Total) Indicating Whether a Major Accident (Fire, Partial Loss of Sight, Hearing, Loss of Limb, Etc.) Has or Has Not Taken Place In the Past 5 Years in the Science Education Program.

| Region          | Major Accident Has Taken Place in Science Education | Major Accident Has Not Taken Place in Science Education |
|-----------------|-----------------------------------------------------|---------------------------------------------------------|
| Total Statewide | 15 (2.2)                                            | 682 (97.8)                                              |

TABLE 21

The Number of School Districts Responding (Percent of Statewide Responding Total) Indicating the Method By Which Teachers of Science Are Made Aware of the District's Policy About Safety Procedures.

| Region          | Procedure Used To Inform Science Teachers of District's Policy About Safety Procedures |                             |                          |                          |               |
|-----------------|----------------------------------------------------------------------------------------|-----------------------------|--------------------------|--------------------------|---------------|
|                 | No Formal Procedure                                                                    | Building and Dept. Meetings | Memorandums and Booklets | Formal Training Programs | Other Methods |
| Total Statewide | 142 (20.4)                                                                             | 479 (68.7)                  | 448 (64.3)               | 41 (5.9)                 | 40 (5.7)      |

TABLE 22

For Specific Grade Levels, Intermediate, Junior High-Middle School, and Senior High School, the Number of School Districts Responding (Percent of Statewide Responding Total) Indicating Those Safety Items Which are Available in Sufficient Quantities in Those Rooms Where They are Needed.

| Safety Items                          | Grade Level |            |            |
|---------------------------------------|-------------|------------|------------|
|                                       | 4 - 6       | 7 - 9      | 10 - 12    |
| Safety Goggles                        | 151 (21.7)  | 536 (76.9) | 605 (86.8) |
| Laboratory Aprons                     | 42 (6.0)    | 300 (43.0) | 549 (78.8) |
| Fire Blankets                         | 47 (6.7)    | 284 (40.7) | 415 (59.5) |
| Fire Extinguishers (CO <sub>2</sub> ) | 272 (39.0)  | 575 (82.5) | 597 (85.7) |
| Sand Buckets                          | 32 (4.6)    | 101 (14.5) | 129 (18.5) |
| First Aid Kits                        | 263 (37.7)  | 447 (64.1) | 473 (67.9) |
| Antidote Chart for Poisons            | 125 (17.9)  | 263 (37.7) | 353 (50.6) |
| Other Safety Items                    | 13 (1.9)    | 65 (9.3)   | 119 (17.1) |

TABLE 23

For Specific Grade Levels, Junior High-Middle School, and Senior High School, The Number of School Districts Responding (Percent of Statewide Responding Total) Indicating that Various Safety Features are Provided for in the District.

| Grade Level        | Adequate Storage For Science Equipment | Lock & Key Storage For Hazardous Chemicals | Hazardous Chemicals Stored In Fireproof & Ventilated Area | Continuous Supervision When Chemicals & Equipment Are Used |
|--------------------|----------------------------------------|--------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| Junior High-Middle | 492 (70.6)                             | 485 (69.6)                                 | 183 (26.3)                                                | 593 (85.1)                                                 |
| Senior High        | 498 (71.4)                             | 541 (77.6)                                 | 263 (37.7)                                                | 604 (86.7)                                                 |

TABLE 24 A

By Enrollment Size the Number of School Districts Responding  
(Percent of Total Responding in That Size) Indicating the Person(s)  
That Makes Decisive Recommendations For Allocation of Funds For  
The Science Budget.

| Enrollment<br>Size | Person(s) That Makes Decisive Recommendation For Allocation<br>Of Funds For Science Budget |                                  |                       |                        |            |          |
|--------------------|--------------------------------------------------------------------------------------------|----------------------------------|-----------------------|------------------------|------------|----------|
|                    | Chief<br>School<br>Officer                                                                 | Assistant<br>Superin-<br>tendent | Building<br>Principal | Department<br>Chairman | Teacher(s) | Other    |
| 1 - 749            | 65 (70.7)                                                                                  | 8 (8.7)                          | 42 (45.7)             | 18 (19.6)              | 25 (27.2)  | 4 (4.3)  |
| 750 - 1499         | 108 (63.9)                                                                                 | 20 (11.8)                        | 90 (53.3)             | 48 (28.4)              | 54 (32.0)  | 11 (6.5) |
| 1500 - 3499        | 158 (66.9)                                                                                 | 37 (15.7)                        | 138 (58.5)            | 73 (30.9)              | 61 (25.8)  | 13 (5.5) |
| 3500 - 5999        | 43 (54.4)                                                                                  | 23 (29.1)                        | 53 (67.1)             | 30 (38.0)              | 19 (24.1)  | 9 (11.4) |
| 6000 - 9999        | 35 (70.0)                                                                                  | 15 (30.0)                        | 33 (66.0)             | 22 (44.0)              | 13 (26.0)  | 5 (10.0) |
| 10,000 - 25,000    | 22 (62.9)                                                                                  | 11 (31.4)                        | 21 (60.0)             | 10 (28.6)              | 7 (20.0)   | 2 (5.7)  |
| Over 25,000        | 18 (50.0)                                                                                  | 13 (36.1)                        | 25 (69.4)             | 7 (19.4)               | 3 (8.3)    | 2 (5.6)  |
| Total State        | 449 (64.4)                                                                                 | 127 (18.2)                       | 402 (57.7)            | 208 (29.8)             | 182 (26.1) | 46 (6.6) |

TABLE 24 B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Person(s) That Makes Decisive Recommendation for Allocation of Funds For the Science Budget.

| New York State Regions     | Person(s) That Makes Decisive Recommendation For Allocation of Funds For Science Budget |                          |                    |                     |            |          |
|----------------------------|-----------------------------------------------------------------------------------------|--------------------------|--------------------|---------------------|------------|----------|
|                            | Chief School Officer                                                                    | Assistant Superintendent | Building Principal | Department Chairman | Teacher(s) | Others   |
| New York City              | 11(45.8)                                                                                | 9(37.5)                  | 19(79.2)           | 4(16.7)             | 1 (4.2)    | 1 (4.2)  |
| Nassau-Suffolk             | 75(63.0)                                                                                | 45(37.8)                 | 72(60.5)           | 49(41.2)            | 31(26.1)   | 11 (9.2) |
| Mid-Hudson                 | 62(63.3)                                                                                | 15(15.3)                 | 62(63.3)           | 37(37.8)            | 30(30.0)   | 7 (7.1)  |
| Upper Hudson               | 45(60.8)                                                                                | 13(17.6)                 | 40(54.1)           | 24(32.4)            | 18(24.3)   | 4 (5.4)  |
| Lake Champlain-Lake George | 29(67.4)                                                                                | 1 (2.3)                  | 14(32.6)           | 4 (9.3)             | 11(25.6)   | 2 (4.7)  |
| Black River-St. Lawrence   | 32(78.0)                                                                                | 3 (7.3)                  | 16(39.0)           | 4 (9.8)             | 9(22.0)    | 0 (0.0)  |
| Upper Mohawk Valley        | 16(57.1)                                                                                | 2 (7.1)                  | 15(53.6)           | 6(21.4)             | 11(39.3)   | 1 (3.6)  |
| Central                    | 30(68.2)                                                                                | 8(18.2)                  | 35(79.5)           | 16(36.4)            | 7(15.9)    | 4 (9.1)  |
| Southern Tier-East         | 41(71.9)                                                                                | 8(14.0)                  | 23(40.4)           | 10(17.5)            | 14(24.6)   | 4 (7.0)  |
| Southern Tier-Central      | 12(66.7)                                                                                | 1 (5.6)                  | 9(50.0)            | 5(27.8)             | 4(22.2)    | 2(11.1)  |
| Southern Tier-West         | 25(58.1)                                                                                | 4 (9.3)                  | 16(37.2)           | 8(18.6)             | 16(37.2)   | 2 (4.7)  |
| Genesee-Finger Lakes       | 40(62.5)                                                                                | 9(14.1)                  | 49(76.6)           | 23(35.9)            | 14(21.9)   | 6 (9.4)  |
| Western                    | 31(70.5)                                                                                | 9(20.5)                  | 32(72.7)           | 18(40.9)            | 16(36.4)   | 2 (4.5)  |
| Total State                | 449(64.4)                                                                               | 127(18.2)                | 402(57.7)          | 208(29.8)           | 182(26.1)  | 46 (6.0) |

TABLE 24 C

By Enrollment Size the Number of School Districts Responding  
(Percent of Total Responding in That Size) Indicating the Person(s)  
That Decides the Specific Items Cut From the Science Budget

| Enrollment<br>Size | Person(s) That Decides the Specifications Cut From<br>The Science Budget |                                  |                       |                        |            |          |
|--------------------|--------------------------------------------------------------------------|----------------------------------|-----------------------|------------------------|------------|----------|
|                    | Chief<br>School<br>Officer                                               | Assistant<br>Superin-<br>tendent | Building<br>Principal | Department<br>Chairman | Teacher(s) | Other    |
| 1 - 747            | 38 (41.3)                                                                | 4 (4.3)                          | 26 (28.3)             | 35 (38.0)              | 53 (57.6)  | 5 (5.4)  |
| 750 - 1499         | 53 (31.4)                                                                | 10 (5.9)                         | 63 (37.3)             | 72 (42.6)              | 100 (59.2) | 13 (7.7) |
| 1500 - 3499        | 71 (30.1)                                                                | 13 (5.5)                         | 82 (34.7)             | 133 (56.4)             | 131 (55.5) | 14 (5.9) |
| 3500 - 5999        | 19 (24.1)                                                                | 9 (11.4)                         | 31 (39.2)             | 53 (67.1)              | 46 (58.2)  | 6 (7.6)  |
| 6000 - 9999        | 19 (38.0)                                                                | 8 (16.0)                         | 22 (44.0)             | 31 (62.0)              | 23 (46.0)  | 4 (8.0)  |
| 10,000 - 25,000    | 6 (17.1)                                                                 | 4 (11.4)                         | 11 (31.4)             | 20 (57.1)              | 23 (65.7)  | 2 (5.7)  |
| Over 25,000        | 9 (25.0)                                                                 | 12 (33.3)                        | 20 (55.6)             | 21 (58.3)              | 7 (19.4)   | 2 (5.6)  |
| Total State        | 215 (30.8)                                                               | 60 (8.6)                         | 255 (36.6)            | 365 (52.4)             | 383 (54.9) | 46 (6.6) |

TABLE 24 D

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Person(s) That Decides the Specific Items Cut From the Science Budget.

| New York State Region      | Person(s) That Decides the Specific Items Cut From The Science Budget |                          |                    |                     |            |           |
|----------------------------|-----------------------------------------------------------------------|--------------------------|--------------------|---------------------|------------|-----------|
|                            | Chief School Officer                                                  | Assistant Superintendent | Building Principal | Department Chairman | Teacher(s) | Other     |
| New York City              | 6 (25.0)                                                              | 9 (37.5)                 | 16 (66.7)          | 11 (45.8)           | 2 (8.3)    | 0 (0.0)   |
| Nassau-Suffolk             | 43 (36.1)                                                             | 22 (18.5)                | 55 (46.2)          | 79 (66.4)           | 54 (45.4)  | 14 (11.8) |
| Mid Hudson                 | 20 (20.4)                                                             | 5 (5.1)                  | 35 (35.7)          | 60 (61.2)           | 46 (46.9)  | 5 (5.1)   |
| Upper Hudson               | 20 (27.0)                                                             | 5 (6.8)                  | 30 (40.5)          | 39 (52.7)           | 42 (56.8)  | 7 (9.5)   |
| Lake Champlain-Lake George | 20 (46.5)                                                             | 0 (0.0)                  | 9 (20.9)           | 8 (18.6)            | 25 (58.1)  | 1 (2.3)   |
| Black River-St. Lawrence   | 16 (39.0)                                                             | 2 (4.9)                  | 8 (19.5)           | 11 (26.8)           | 25 (61.0)  | 1 (2.4)   |
| Upper Mohawk River         | 10 (35.7)                                                             | 1 (3.6)                  | 10 (35.7)          | 13 (46.4)           | 16 (57.1)  | 1 (3.6)   |
| Central                    | 6 (13.6)                                                              | 2 (4.5)                  | 12 (27.3)          | 28 (63.6)           | 32 (72.7)  | 4 (9.1)   |
| Southern Tier East         | 20 (35.1)                                                             | 3 (5.3)                  | 14 (24.6)          | 23 (40.4)           | 39 (68.4)  | 4 (7.0)   |
| Southern Tier Central      | 8 (44.4)                                                              | 0 (0.0)                  | 4 (22.2)           | 5 (27.8)            | 13 (72.2)  | 2 (11.1)  |
| Southern Tier West         | 19 (44.2)                                                             | 4 (9.3)                  | 12 (27.9)          | 14 (32.6)           | 24 (55.8)  | 1 (2.3)   |
| Genesee-Finger Lakes       | 11 (17.2)                                                             | 2 (3.1)                  | 26 (40.6)          | 48 (75.0)           | 40 (62.5)  | 4 (6.3)   |
| Western                    | 16 (36.4)                                                             | 5 (11.4)                 | 24 (54.5)          | 26 (59.1)           | 25 (56.8)  | 2 (4.5)   |
| Total State                | 215 (30.8)                                                            | 60 (8.6)                 | 255 (36.6)         | 365 (52.4)          | 383 (54.9) | 46 (6.6)  |

TABLE I-A

By Enrollment Size the Number of School Districts Responding (Percent of Total Responding in That Size) Indicating the Percent of Time Their Secondary Science Department Head or Chairman Has Not Been Scheduled For Teaching.

| Enrollment Size | Districts Indicating No Secondary Science Dept. Head or Chairman or Not Responding | Distribution of Percent of Time (Percent of Total Responding) Secondary Science Department Head or Chairman Has <u>Not</u> Been Scheduled For Teaching |          |          |          |          |          |          |
|-----------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|
|                 |                                                                                    | 0-5%                                                                                                                                                   | 6-15%    | 16-30%   | 31-50%   | 51-75%   | 76-90%   | 91-100%  |
| 1-749           | 185(100.0)                                                                         | 0 (0.0)                                                                                                                                                | 0 (0.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0)  |
| 750-1,499       | 142(97.9)                                                                          | 0 (0.0)                                                                                                                                                | 0 (0.0)  | 1(33.3)  | 0 (0.0)  | 2(66.6)  | 0 (0.0)  | 0 (0.0)  |
| 1,500-3,499     | 163(67.7)                                                                          | 1 (2.6)                                                                                                                                                | 1 (2.6)  | 1 (2.6)  | 0 (0.0)  | 1 (2.6)  | 12(31.6) | 22(57.9) |
| 3,500-5,999     | 42(45.7)                                                                           | 0 (0.0)                                                                                                                                                | 10(20.0) | 15(30.0) | 24(48.0) | 1 (2.0)  | 0 (0.0)  | 0 (0.0)  |
| 6,000-9,999     | 24(31.2)                                                                           | 1 (1.9)                                                                                                                                                | 0 (0.0)  | 2(37.7)  | 15(28.3) | 22(41.5) | 13(24.5) | 0 (0.0)  |
| 10,000-25,000   | 9(24.3)                                                                            | 0 (0.0)                                                                                                                                                | 0 (0.0)  | 0 (0.0)  | 2 (7.1)  | 2 (7.1)  | 12(42.9) | 12(42.9) |
| Over 25,000     | 35(61.4)                                                                           | 9(40.9)                                                                                                                                                | 3(13.6)  | 3(13.6)  | 0 (0.0)  | 2 (9.1)  | 1 (4.5)  | 4(18.2)  |
| Total State     | 600(75.6)                                                                          | 11 (5.7)                                                                                                                                               | 14 (7.2) | 22(11.3) | 41(21.1) | 30(15.5) | 38(19.6) | 38(19.6) |

TABLE I-B

By Region the Number of School Districts Responding (Percent of Total Responding in That Region) Indicating the Percent of Time Their Secondary Science Department Head or Chairman Has Not Been Scheduled For Teaching.

| New York State<br>Regions      | Districts<br>Indicating<br>No Second-<br>ary Science<br>Dept. Head<br>or Chairman<br>or Not<br>Responding | Distribution of Percent of Time (Percent of Total Responding)<br>Secondary Science Department Head or Chairman<br>Has <u>Not</u> Been Scheduled For Teaching |          |          |          |          |          |         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|---------|
|                                |                                                                                                           | 0-5%                                                                                                                                                         | 6-15%    | 16-30%   | 31-50%   | 51-75%   | 76-90%   | 91-100% |
| New York City                  | 33(82.5)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1(14.3)  | 0 (0.0)  | 1(14.3)  | 1(14.3)  | 3(42.9)  | 1(14.3) |
| Nassau-Suffolk                 | 58(47.2)                                                                                                  | 0 (0.0)                                                                                                                                                      | 0 (0.0)  | 13(20.0) | 24(36.9) | 21(32.3) | 6 (9.2)  | 1 (1.5) |
| Mid-Hudson                     | 82(82.0)                                                                                                  | 0 (0.0)                                                                                                                                                      | 3(10.7)  | 11(39.3) | 7(25.0)  | 3(10.7)  | 1 (3.6)  | 3(10.7) |
| Upper Hudson                   | 73(83.9)                                                                                                  | 0 (0.0)                                                                                                                                                      | 3(21.3)  | 1 (7.1)  | 6(42.6)  | 4(28.4)  | 0 (0.0)  | 0 (0.0) |
| Lake Champlain-<br>Lake George | 46(93.9)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1(33.3)  | 1(33.3)  | 0 (0.0)  | 1(33.3)  | 0 (0.0)  | 0 (0.0) |
| Black River-<br>St. Lawrence   | 39(90.7)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1(25.0)  | 2(50.0)  | 1(25.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0) |
| Upper Mohawk                   | 24(77.4)                                                                                                  | 1(14.3)                                                                                                                                                      | 0 (0.0)  | 3(42.9)  | 2(28.6)  | 1(14.3)  | 0 (0.0)  | 0 (0.0) |
| Central                        | 35(76.1)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1 (9.1)  | 3(27.3)  | 5(45.5)  | 2(18.2)  | 0 (0.0)  | 0 (0.0) |
| Southern Tier<br>East          | 55(87.3)                                                                                                  | 0 (0.0)                                                                                                                                                      | 4(50.0)  | 2(25.0)  | 2(25.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0) |
| Southern Tier<br>Central       | 20(90.1)                                                                                                  | 1(50.0)                                                                                                                                                      | 0 (0.0)  | 0 (0.0)  | 0 (0.0)  | 1(50.0)  | 0 (0.0)  | 0 (0.0) |
| Southern Tier<br>West          | 42(89.4)                                                                                                  | 0 (0.0)                                                                                                                                                      | 3(60.0)  | 1(20.0)  | 1(20.0)  | 0 (0.0)  | 0 (0.0)  | 0 (0.0) |
| Genesee-<br>Finger Lakes       | 57(82.6)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1 (8.3)  | 6(50.0)  | 2(16.6)  | 2(16.6)  | 0 (0.0)  | 1 (8.3) |
| Western                        | 36(83.7)                                                                                                  | 0 (0.0)                                                                                                                                                      | 1(14.3)  | 5(71.5)  | 0 (0.0)  | 1(14.5)  | 0 (0.0)  | 0 (0.0) |
| Total State                    | 600(78.6)                                                                                                 | 2 (1.2)                                                                                                                                                      | 19(11.0) | 48(27.7) | 51(29.5) | 37(21.4) | 10(12.0) | 6 (3.6) |

TABLE II

For Specific Science Courses and Levels (K-12) the Number of School Districts Responding (Percent of Responding Total) Indicating Number of Weeks Per Year the Courses Meet.

| Course or Level           | Number of Weeks Per Year Course Meets |          |         |            |
|---------------------------|---------------------------------------|----------|---------|------------|
|                           | 1-10                                  | 11-20    | 21-30   | 31-40      |
| Elementary Science        | 1 (0.3)                               | 7 (2.1)  | 0 (0.0) | 323 (97.6) |
| Junior High Science       | 2 (0.3)                               | 25 (3.4) | 2 (0.3) | 678 (95.9) |
| Regents Biology           | 1 (0.2)                               | 4 (0.6)  | 0 (0.0) | 646 (99.2) |
| Non-Regents Biology       | 2 (0.4)                               | 11 (2.4) | 0 (0.0) | 447 (97.2) |
| Regents Chemistry         | 1 (0.2)                               | 1 (0.2)  | 0 (0.0) | 618 (99.7) |
| Non-Regents Chemistry     | 2 (0.6)                               | 6 (1.7)  | 0 (0.0) | 354 (97.8) |
| Regents Physics           | 2 (0.3)                               | 2 (0.3)  | 1 (0.2) | 590 (99.2) |
| Non-Regents Physics       | 2 (1.2)                               | 2 (1.2)  | 0 (0.0) | 162 (97.6) |
| Regents Earth Science     | 1 (0.2)                               | 2 (0.4)  | 0 (0.0) | 463 (99.4) |
| Non-Regents Earth Science | 0 (0.0)                               | 7 (3.3)  | 0 (0.0) | 202 (96.7) |

TABLE 111

For Specific Science Courses and Levels (K-12) the Number of School Districts Responding (Percent of Responding Total) Indicating Number of Minutes Per Week Course Is Taught.

| Course                    | No. Minutes Per Week Course Is Taught |         |         |         |          |           |           |           |           |          |
|---------------------------|---------------------------------------|---------|---------|---------|----------|-----------|-----------|-----------|-----------|----------|
|                           | 31-60                                 | 61-90   | 91-120  | 121-150 | 151-180  | 181-210   | 211-240   | 241-270   | 271-300   | 300+     |
| Elementary Science        | 1(0.7)                                | 5(3.6)  | 2(1.4)  | 5(3.6)  | 26(18.8) | 70(50.7)  | 19(13.8)  | 8(5.8)    | 1(0.7)    | 1(0.7)   |
| Junior High Science       | 2(0.3)                                | 16(2.4) | 14(2.1) | 2(0.3)  | 80(12.1) | 392(59.7) | 123(18.7) | 20(3.0)   | 3(0.5)    | 5(0.8)   |
| Regents Biology           | 4(0.6)                                | 18(2.8) | 14(2.2) | 6(0.9)  | 30(4.7)  | 177(27.9) | 131(20.6) | 104(16.4) | 87(13.7)  | 64(10.1) |
| Non Regents Biology       | 1(0.2)                                | 11(2.5) | 10(2.3) | 2(0.5)  | 42(9.7)  | 208(47.9) | 105(24.2) | 30(7.8)   | 10(2.3)   | 11(2.5)  |
| Regents Chemistry         | 4(0.7)                                | 16(2.6) | 13(2.1) | 5(0.8)  | 25(4.1)  | 163(26.9) | 90(14.8)  | 106(17.5) | 108(17.3) | 77(12.7) |
| Non Regents Chemistry     | 3(0.8)                                | 13(3.6) | 11(3.1) | 3(0.8)  | 26(7.2)  | 148(41.1) | 81(22.5)  | 40(11.1)  | 22(6.1)   | 13(3.6)  |
| Regents Physics           | 4(0.7)                                | 17(2.9) | 15(2.5) | 6(1.0)  | 26(4.4)  | 160(27.0) | 99(16.7)  | 90(15.2)  | 106(17.9) | 69(11.7) |
| Non Regents Physics       | 1(0.6)                                | 8(4.8)  | 2(1.2)  | 3(1.8)  | 12(7.2)  | 59(35.8)  | 44(26.7)  | 18(10.9)  | 9(5.5)    | 9(5.5)   |
| Regents Earth Science     | 2(0.4)                                | 15(3.3) | 9(2.0)  | 5(1.1)  | 22(4.8)  | 146(31.8) | 95(20.7)  | 69(15.0)  | 57(12.4)  | 39(8.5)  |
| Non Regents Earth Science | 0(0.0)                                | 3(1.6)  | 5(2.7)  | 0(0.0)  | 14(7.7)  | 113(62.1) | 32(17.6)  | 11(6.0)   | 2(1.1)    | 2(1.1)   |

TABLE IV

For Specific Science Courses (7-12) the Number of Uncertified and Certified Science Teachers (Percent of Total Reported)

| Course                    | Not<br>Reported | Certification Status of Science Teachers |             |
|---------------------------|-----------------|------------------------------------------|-------------|
|                           |                 | Uncertified                              | Certified   |
| Junior High Science       | 133 (2.0)       | 391 (5.9)                                | 6225 (94.1) |
| Regents Biology           | 56 (2.3)        | 36 (1.5)                                 | 2304 (98.5) |
| Non Regents Biology       | 29 (2.2)        | 50 (3.8)                                 | 1255 (96.1) |
| Regents Chemistry         | 32 (2.1)        | 40 (2.7)                                 | 1432 (97.3) |
| Non Regents Chemistry     | 18 (2.8)        | 30 (4.7)                                 | 604 (95.3)  |
| Regents Physics           | 24 (2.6)        | 78 (8.5)                                 | 838 (91.5)  |
| Non Regents Physics       | 5 (2.2)         | 24 (10.7)                                | 201 (89.3)  |
| Regents Earth Science     | 16 (1.8)        | 76 (8.8)                                 | 789 (91.2)  |
| Non Regents Earth Science | 10 (2.2)        | 51 (11.4)                                | 398 (88.6)  |